

ABSTRACT OF THE DISCLOSURE

Disclosed is a surface acoustic wave substrate including: a piezoelectric or electrostrictive substrate
5 having large electromechanical coupling coefficient; and a thin film formed on the substrate and having variation characteristics of frequency of a surface acoustic wave relative temperature variation opposite to that of the substrate. The substrate is a LiNbO₃ substrate having a cut
10 angle of rotated Y plate within a range from -10° to +30° and propagating a piezoelectric leaky surface wave having a propagation velocity higher than that of a Rayleigh type surface acoustic wave along X-axis direction or within a range of ± 5° with respect to X-axis direction. A value of H/λ falls
15 within a range from 0.05 to 0.35, where H is the film thickness of the thin film, and λ is the wavelength of operating center frequency of the piezoelectric leaky surface wave.